

CLAIMS

1. An endoluminal prosthesis, comprising:
a prosthetic trunk comprising a trunk lumen extending therethrough, a wall, and an anastomosis in the wall, wherein the prosthetic trunk has a circumference; and
a prosthetic branch comprising a branch lumen extending therethrough, wherein the branch lumen is in fluid communication with the trunk lumen through the anastomosis, and wherein the prosthetic branch is disposed longitudinally along and circumferentially about the prosthetic trunk.
2. The prosthesis of claim 1, wherein the prosthetic branch extends about the prosthetic trunk at least about one-fourth the circumference of the prosthetic trunk.
3. The prosthesis of claim 2, wherein the prosthetic branch extends about the prosthetic trunk at least about one-half the circumference of the prosthetic trunk.
4. The prosthesis of claim 3, wherein the prosthetic branch extends about the prosthetic trunk at least about two-thirds the circumference of the prosthetic trunk.
5. The prosthesis of claim 1, wherein the prosthetic branch extends longitudinally along the prosthetic trunk more than about 10mm.
6. The prosthesis of claim 3, wherein the prosthetic branch extends longitudinally along the prosthetic trunk more than about 10mm.
7. The prosthesis of claim 5, wherein the prosthetic branch extends longitudinally along the prosthetic trunk more than about 30mm.
8. The prosthesis of claim 6, wherein the prosthetic branch extends longitudinally along the prosthetic trunk more than about 30mm.

9. The prosthesis of claim 7, wherein the prosthetic branch extends longitudinally along the prosthetic trunk more than about 50mm.
10. The prosthesis of claim 8, wherein the prosthetic branch extends longitudinally along the prosthetic trunk more than about 50mm.
11. The prosthesis of claim 1, wherein the branch lumen is disposed longitudinally and circumferentially outside the prosthetic trunk.
12. The prosthesis of claim 1, wherein the branch lumen is disposed longitudinally and circumferentially inside the prosthetic trunk.
13. The prosthesis of claim 1, wherein the prosthetic branch is attached at a point on the prosthetic trunk that is distal to the anastomosis.
14. The prosthesis of claim 13, wherein the prosthetic branch is attached at multiple points on the prosthetic trunk that are distal to the anastomosis.
15. The prosthesis of claim 1, wherein the prosthetic branch is attached at a point on the prosthetic trunk that is proximal to the anastomosis.
16. The prosthesis of claim 15, wherein the prosthetic branch is attached at multiple points on the prosthetic trunk that are proximal to the anastomosis.
17. The prosthesis of claim 1, wherein the prosthetic branch comprises a proximal ostium and a distal ostium.
18. The prosthesis of claim 17, wherein the proximal ostium is infundibular.
19. The prosthesis of claim 17, wherein the diameter of the proximal ostium of the prosthetic branch is larger than the distal ostium of the prosthetic branch.

20. The prosthesis of claim 17, wherein the distal ostium is beveled.
21. The prosthesis of claim 1, further comprising a second prosthetic branch having a second branch lumen extending therethrough, wherein the second branch lumen is in fluid communication with the trunk lumen through a second anastomosis and wherein the second prosthetic branch is disposed longitudinally and circumferentially about the prosthetic trunk.
22. The prosthesis of claim 8, further comprising a second prosthetic branch having a second branch lumen extending therethrough, wherein the second branch lumen is in fluid communication with the trunk lumen through a second anastomosis and wherein the second prosthetic branch is disposed longitudinally and circumferentially about the prosthetic trunk.
23. The prosthesis of claim 22, wherein both prosthetic branches shunt blood distally relative to the prosthetic trunk.
24. The prosthesis of claim 1, further comprising a branch extension connected to and in fluid communication with the prosthetic branch.
25. The prosthesis of claim 2, wherein the prosthetic branch has an angle of access that is greater than 20°.
26. The prosthesis of claim 25, wherein the angle of access is greater than 60°.
27. The prosthesis of claim 2, wherein the prosthetic branch is skewed between about 40° and about 60°.
28. The prosthesis of claim 2, wherein the prosthetic branch is skewed between about 0° and about 40°.
29. The prosthesis of claim 2, wherein the prosthetic branch has an angle of incidence that is between about 20° and about 60°.

30. The prosthesis of claim 29, wherein the prosthetic branch has an angle of incidence that is between about 35° and about 50°.

31. A method of connecting modules of an endoluminal prosthesis, comprising:

providing a prosthetic trunk;

providing a prosthetic branch having proximal and distal ends;

anastomosing the proximal end of the prosthetic branch to the prosthetic trunk; and

positioning the prosthetic branch and attaching the prosthetic branch to the prosthetic trunk so as to provide a helical fluid passage.

32. A method of increasing the angle of access for an endoluminal prosthesis, comprising:

providing a prosthetic trunk comprising a trunk lumen extending therethrough, a wall and an anastomosis in the wall; and

providing a prosthetic branch having a branch lumen extending therethrough, wherein the branch lumen is in fluid communication with the trunk lumen through the anastomosis and disposed longitudinally and circumferentially about the trunk lumen.